

ENCAPSULATION PROTOCOL FOR LINKING STORAGE AREA
NETWORKS OVER A PACKET-BASED NETWORK

ABSTRACT OF THE INVENTION.

A method and system are disclosed for encapsulating SCSI protocol for data transmission between two or more nodes across a packet-based network. The method of the present invention includes the steps of, at each node in the network, identifying all other available nodes on the network, and the remote devices attached to those nodes; representing one or more of the attached remote devices such that they are made available to the node's local hosts; encapsulating the I/O phases between one or more local hosts and one or more of the remote devices; and repeating the encapsulating step for subsequent I/Os between one or more hosts and one or more devices. The step of encapsulating I/O phases between a local host and a remote device can further comprise encapsulating task management functions, error recovery functions and normal I/O processing functions. Each node can be a Fibre Channel-to-SCSI router.